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(54) Title: EPOXIDATION PROCESS USING AMINE CATALYSTS

(57) Abstract

A process for the epoxidation of an alkene, which process comprises reaction of an alkene with an oxidising agent in the presence of a catalyst, characterised in that the catalyst is an amine of formula (I), wherein T represents hydrogen or a moiety of formula (a); R¹, R², R³, R⁴, R⁵ and R⁶ each independently represents hydrogen, optionally substituted alkyl, an optionally substituted aralkyl group wherein substituents for the above mentioned groups are selected from up to three of alkyl, aryl, heterocycyl, hydroxy, alkoxy or a group NR⁵R¹ wherein R³ and R¹ each independently represents hydrogen, alkyl or alkylcarbonyl and R⁷ represents hydrogen, alkyl, aryl or aralkyl; or T represents a moiety (a) wherein R¹ together with R² represents an optionally substituted alkylene chain comprising 2 to 6 carbon atoms the alkylene chain being optionally interrupted with an oxygen atom or a group NR^p wherein R^p is hydrogen or alkyl, and wherein optional substituents for any carbon atom of the alkylene chain are selected from hydroxy, alkoxy, oxo or a group NR^sR^t wherein R^s and R^t each independently represents hydrogen, alkyl or alkylcarbonyl or substituents on any two adjacent carbon atoms of the chain together with the carbon atoms to which they are attached form an alicyclic, aryl or heterocyclic ring; and R³, R⁴, R⁵, R⁶ and R⁷ are as defined above.

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